

WHAT IS CLAIMED IS:

1. A method of distributing notification regarding an event from an event generator to an event listener in a network environment, the method comprising the steps of:
 - (a) receiving an event message from the event generator, said event message being Web Service based and including an event source element and an extensible event content element;
 - (b) creating an event envelope containing said event content element;
 - (c) identifying the event listener as a registered event listener entitled to receive notice of the event; and
 - (d) transmitting the event envelope to the event listener.
2. The method claimed in claim 1, wherein said event envelope includes a timestamp.
3. The method claimed in claim 2, wherein said timestamp includes a time of receipt of said event message.
4. The method claimed in claim 1, wherein said event source element comprises an event generator address for the event generator and an event type identifier.
5. The method claimed in claim 4, wherein said event type identifier corresponds to a schema, and wherein said schema defines a structure for said event content element.
6. The method claimed in claim 5, further including

steps of registering the event generator, storing said event source element in an event source library, and storing said schema in an event schema library.

7. The method claimed in claim 4, further including a step of publishing said event source element through a Web Service Interface.
8. The method claimed in claim 7, further including steps of providing the event listener with said event source element, including an associated schema, through said Web Service Interface, and implementing a Listener Web Service Interface incorporating said associated schema at the event listener.
9. The method claimed in claim 7, further including a step of matching the event generator and the event listener based upon the event listener having implemented a Listener Web Service Interface incorporating a schema associated with the event type identifier.
10. The method claimed in claim 1, further including a step of receiving an event policy and wherein said step of identifying includes applying said event policy.
11. The method claimed in claim 10, wherein said event policy is received from the event generator or the event listener.
12. The method claimed in claim 10, wherein said event policy includes a condition and an action, and wherein said action comprises a run-time object.
13. The method claimed in claim 12, wherein said condition comprises a condition upon said extensible

event content element, and wherein said condition is expressed using X-Path language.

14. The method claimed in claim 1, wherein said event content element is an XML document, and wherein the structure of said XML document is defined by an XSD document.
15. The method claimed in claim 1, wherein said step of creating further includes storing said event envelope in a message queue.
16. A notification framework for distributing notification regarding an event from an event generator to an event listener in a network environment, the notification framework including:
 - (a) an event handler for receiving an event message from the event generator, the event message being Web Service based and including an event source element and an extensible event content element, and encapsulating the event content element in an event envelope;
 - (b) an event listener library identifying registered event listeners entitled to receive notice of the event, wherein said registered event listeners include the event listener; and
 - (c) an event policy library including an event policy element for transmitting the event envelope to the event listener.
17. The notification framework claimed in claim 16, wherein said event envelope includes a timestamp.
18. The notification framework claimed in claim 17, wherein said timestamp includes a time of receipt of said event message.

19. The notification framework claimed in claim 16, further including an event source library, wherein said event source library contains said event source element, said event source element comprising an event generator address for the event generator and an event type identifier.
20. The notification framework claimed in claim 19, further including an event schema library, wherein said event schema library includes a schema document corresponding to said event type identifier, and wherein said schema document defines a structure for said event content element.
21. The notification framework claimed in claim 19, further including an event source publisher for publishing said event source element through a Web Service Interface.
22. The notification framework claimed in claim 21, wherein said event source publisher further publishes a Web Service Definition Language document for implementation by the event listener, said Web Service Definition Language document importing a schema defining the structure of said event envelope and a schema defining the structure of said event content element.
23. The notification framework claimed in claim 16, wherein said event policy element includes a condition and an action, and wherein said action comprises a run-time object.
24. The notification framework claimed in claim 23, wherein said condition comprises a condition upon said extensible event content element and wherein said condition is expressed using XPath language.

25. The notification framework claimed in claim 16, wherein said event content element comprises an XML document, and wherein the structure of said XML document is defined by an XSD document.
26. The notification framework claimed in claim 16, further including a message queue for receiving and storing said event envelope from said event handler prior to transmission by said event policy element.
27. A computer program product having a computer readable medium tangibly embodying computer executable instructions for distributing notification regarding an event from an event generator to an event listener in a network environment, the computer executable instructions comprising:
 - (a) computer executable instructions for receiving an event message from the event generator, said event message being Web Service based and including an event source element and an extensible event content element;
 - (b) computer executable instructions for creating an event envelope containing said event content element;
 - (c) computer executable instructions for identifying the event listener as a registered event listener entitled to receive notice of the event; and
 - (d) computer executable instructions for transmitting the event envelope to the event listener.
28. The computer program product claimed in claim 27, wherein said event envelope includes a timestamp.

29. The computer program product claimed in claim 28, wherein said timestamp includes a time of receipt of said event message.
30. The computer program product claimed in claim 27, wherein said event source element comprises an event generator address for the event generator and an event type identifier.
31. The computer program product claimed in claim 30, wherein said event type identifier corresponds to a schema, and wherein said schema defines a structure for said event content element.
32. The computer program product claimed in claim 31, further including computer executable instructions for registering the event generator, storing said event source element in an event source library, and storing said schema in an event schema library.
33. The computer program product claimed in claim 30, further including computer executable instructions for publishing said event source element through a Web Service Interface.
34. The computer program product claimed in claim 33, further including computer executable instructions for providing the event listener with said event source element, including an associated schema, through said Web Service Interface, and computer executable instructions for implementing a Listener Web Service Interface incorporating said associated schema.
35. The computer program product claimed in claim 33, further including computer executable instructions for matching the event generator and the event listener based upon the event listener having

implemented a Listener Web Service Interface incorporating a schema associated with the event type identifier.

36. The computer program product claimed in claim 27, further including computer executable instructions for receiving an event policy and wherein said computer executable instructions for identifying include computer executable instructions for applying said event policy.
37. The computer program product claimed in claim 36, wherein said event policy is received from the event generator or the event listener.
38. The computer program product claimed in claim 36, wherein said event policy includes a condition and an action, and wherein said action comprises a run-time object.
39. The computer program product claimed in claim 38, wherein said condition comprises a condition upon said extensible event content element, and wherein said condition is expressed using X-Path language.
40. The computer program product claimed in claim 27, wherein said event content element is an XML document, and wherein the structure of said XML document is defined by an XSD document.
41. The computer program product claimed in claim 27, wherein said computer executable instructions for creating further include computer executable instructions for storing said event envelope in a message queue.